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A292.9 POWDER RIVER, BURNT RIVER and PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of APRIL 1,1954

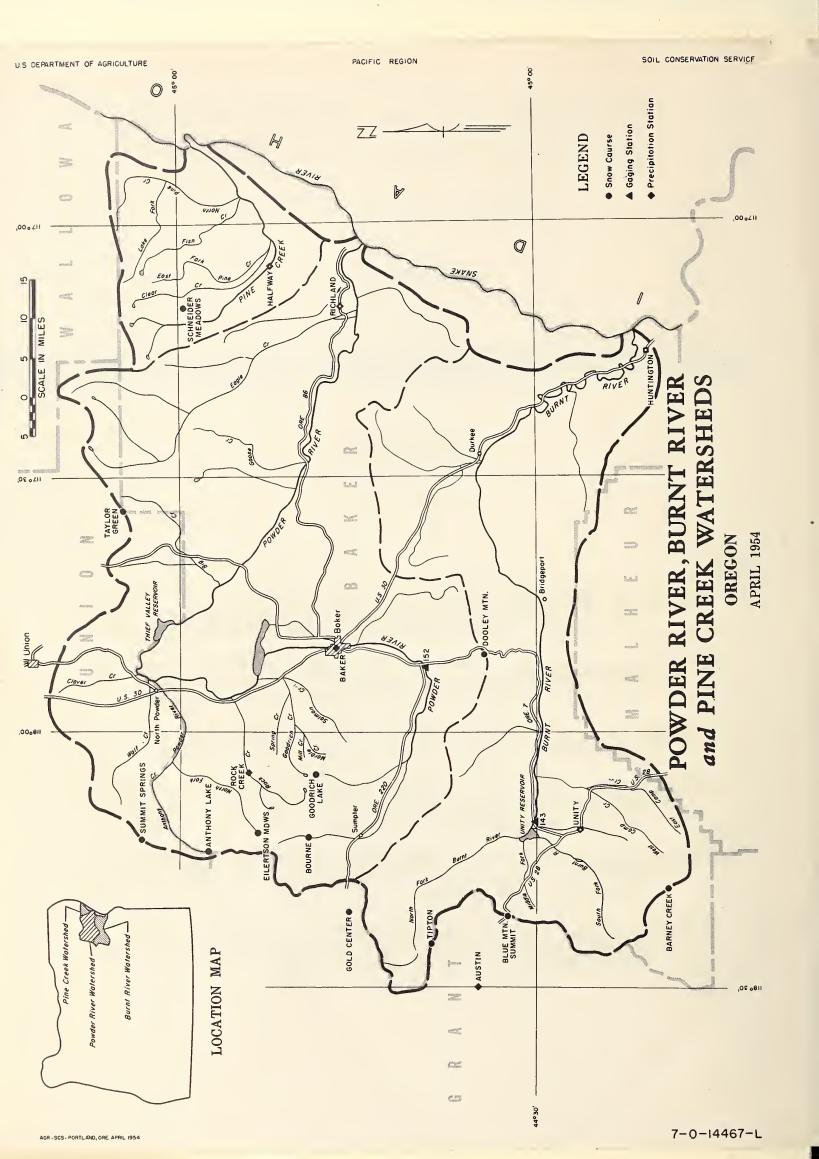


U.S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

Page

- 1 2 Water Supply Outlook: Below average water supplies for most areas with late season shortages expected for all except the earliest water rights. Storage water will be barely adequate this year.
 - 2 Streamflow Forecasts: The Powder is forecast to flow 77 percent of the 10 year average and Burnt River 60 percent of average. Flow of North Powder, Eagle and Pine Creeks will be below average.
 - Reservoir Storage: Stored water in Unity and Thief Valley reservoir was reported as about average and satisfactory for this season.
 - Snow Cover: This year's snow-pack varies from 75 percent average on the Burnt to 88 percent average on Pine Creek. On the Powder the snow-cover is 85 percent average.
 - 3 Soil Moisture: Soils up to 4000 feet are fairly dry. At higher elevations they have improved somewhat over the abnormally dry situation of last season.
 - 4 Precipitation: Fall precipitation was 59 percent normal; while winter precipitation was 70 percent normal. September through March precipitation was 67 percent normal.



WATER SUPPLY OUTLOOK - For April-September, 1954 a

	Acreage	*
Source of Water	Irrigat	ed Outlank
	Committee of the Commit	Sufficient water for one irrigation.
Anthony Creek	1,667	Snow-cover is slightly below last
	4	year and average
		•
Big Creek	3,986	Only enough water for one irrigation.
246 010011	23700	Snow-cover is 62 percent of last
		year 75 percent average.
Burnt River	27,448	Sufficient water for all lands ex-
DELIG ITTACT	213440	cept on the North fork where late
		season shortages will be experienced.
4		Snow-cover is 75 percent average
		and only 61 percent of last year.
Clear Creek	3,570	Less irrigation water than last year. Snow-cover is about half of last year's cover.
		last year's cover
Eagle and Goose	10,449	Less irrigation water than last year.
		Snow-cover is 69 percent of last year
		and 89 percent of average.
Fish Creek and Lake	1,463	
Forks		Less water than last year. Snow-
		cover is about half of last year's
		cover
Marble, Mill and	2,780	Sufficient water for one irrigation.
Goodrich Creeks	-31	Snow-cover is 79 percent of last
		year and 90 percent average.
McMullen Slough	1,800	Less water than last year for
MCMULIAN DIVUGII	000	Less water than last year for
		irrigation. Snow-cover is 69 percent of last year.
Pine Creek	11,381	Less irrigation water than last year.
	•	Less irrigation water than last year. Snow-cover is 89 percent average and
		69 percent of last year. Dry Gulch area will be short of water.
Pine (East) Creek	1,363	Less irrigation water than last
	-	year. Snow-cover is about half of
		last year's cover.
Powder River	1.2 086	Mcariota for landa control from Thi of
1)MGel. ICTAel.	43,980	Valley reservoir but short supplies
		for late water rights especially late
		Adequate for lands served from Thief Valley reservoir but short supplies for late water rights especially late in the season. Snow-cover is 85%
		percent average & 74 percent of last
Powder (North) River	18,146	Sufficient water for one irrigation.
		Snow-cover is 88 percent of last
		year and about 85 percent average.
		hear and about ob betteme average

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

Canada of White	Adreage
Source of Water	Irrigated Outlook
Rock Creek	9,902 Sufficient for one good irrigation. And all lands. Late rights will suffer late in the season. Snow-cover is 66 percent of last year.
Salmon Creek	1,200 Sufficient water for one irrigation. Snow-cover is 79 percent of last year.
Spring Creek	290 Sufficient water for one irrigation only.
Wolf Creek	3,515 Sufficient water for one irrigation only. Snow-cover is 82 percent of last year.

STREAMFLOW FORECASTS^a - As of April 1, 1954

Section to dec	Gaging Station	Seasonal St Forecast		1000 a.f. Avg.	1954 as %
Nos	Name	Apr:Sept.			of Ave
143	Burnt River near Hereford*	27.0	protocols collecto	45.1	60
152	Powder River at Salisbury	50.0	distant distant	64.7	77
152	Powder River at Salisbury	Codes accome	48.0	62.7	77
	* Corrected to natural fl	wc.			

RESERVOIR STORAGE

	Usable	Thousand	a.f.	in storage about	
	Capacity	4.		10 yr. Avg.	1954 as %
Reservoir	1000 a.f.	1954	1953	1942-51	of yr.Avg.
Unity	25.2	15.4	14.9	13.7	112

SNOW COVER - As of April 1, 1954

	Snow Course			.95L		Content	(in)	1954
No	Name	Elev	Snow Depth (in)	Water Depth (in)	1953	Average		as % of Avg
क्ल	below 55001	colle					* *	
141	Blue Mtn. Sum.	50981	15.5	5.3	10,0	7.8		68
156	Dooley Mtn.	54301	14.7	4.4	11.6	9.2		48
151B	Eilertson Mdws.	54001	30.8	10.2	15.4	12.1		84
249	Gold Center	5340	31.8	12.5	15.5	12.2		102
161	Schneider Mdws.	5400	66.4	27.0	39.3	30.5		89
142	Tipton	51008	21.02	7.2	11.3	9.8		73
	Average			11.1	17.2	13.6		82
**	55001 to 60001	gith						
143	Barney Cr.	59501	22.3	6.0	8.8	9.3		65
154	Bourne	5800	40.2	15.8	20.6	16.0		99
185	Taylor Green	5740°	35.8	12.8	20.5	17.0		75
-	Average		444	11.5	16.6	14.1		82
-	Above 6000%	4000						
155	Anthony Lake	7125	75.2	26.7	30.7	27.9		96
157	Goodrich Lake	67751	91.3	38.1*	48.0	42.5		90
184	Summit Springs	6000%	49.7	16.6	18.6	21.4		78
	Average		at to	27.1	32.1	30.6		89
	(Average 12 Snow artly estimated	Course	s)	15.2	20•9	18,0		84

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1954
Lower Valleys	Fairly dry	Fairly dry
Upper Valleys	Fairly dry	Fairly dry
Mountains	Nearly Normal	Dryer than normal

PRECIPITATION DATA - As of April 1, 1954

Station	Ω				Pre	ecipi	tation	(inc	nes)		Avg as
Name	Elev.	Sept.	Oct.1	ovc/	Dec.	Jan.	Feb.	Mar.	Avg	Normal*	% of Normal
Austim 3S	4333	0.01	1.23	e 2.63	e 2.26	2.73	0.96	0.71	1.50	1.95	77%
Baker WB City	3L;L;6	T ·	0.86	1.36	1.38	0.84	0.lll	0.72	0.30	1.17	68%
Halfway	2675	0.00	0.20	0 1.00	3,22	1.77	0.80	1.65	1.23	2.40	51%
Huntington	2150	0.00	0.20	the same of the last of the la	2.02	1,27	0.40		0.79	1.31	60%
Richland	2215	T	0.25	0.97	0.75	0.55	0.20	0. 48	0.46	0.95	48%
Rock Creek	4150	0.11	0.81	2.34	2.71	3.80	1.32	1.15	1.75	1.91	92%
Unity	4031	0.02	0.58	0.81	0.88	0.92	0.39	0.43	0.58	1.00	58%
Average		0.02	0.59	1.43	1.89	1.70	0.64	0.84	1.02	1.53	67%
Normal		0.72	1.10	1.63	2.03	1.99	1.84	1.35			uje dentru vijy godenskim vilomether med kreditiske
Average as % of Norma	1	3%	54%	88%	93%	85%	33%	62%			
Fall (Sep- Oct-Nov) as % of Norma	S	9-6	59%	~							

e-estimated

*-as published USWB

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POWDER RIVER, BURNT RIVER and PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK



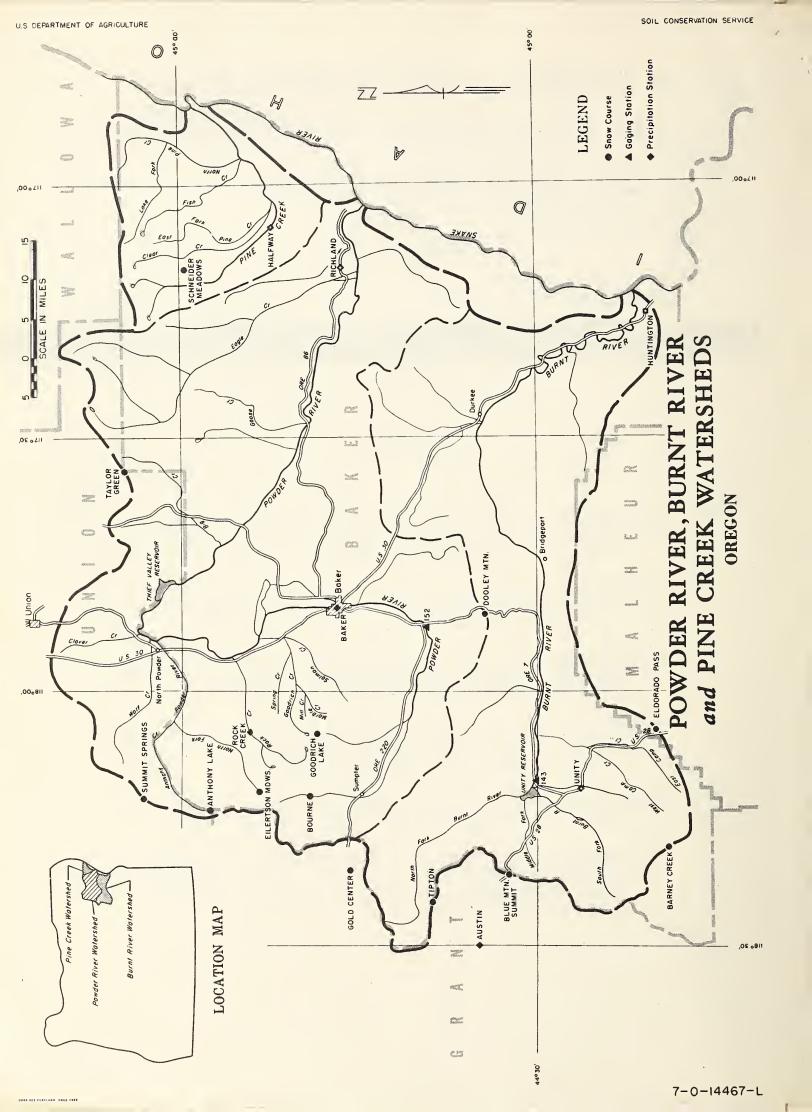
as of APRIL 1, 1955

U.S.SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

Page

- Water Supply Outlook: "Poor" to "fair" supplies of water are forecast for most areas in these basins with late season shortages foreseen for all except the earliest water rights.
 - 2 Streamflow Forecasts: The Powder is forecast to flow 59 percent of the 10 year average and Burnt River 52 percent of average. Flow of other streams will be proportionately low.
 - Reservoir Storage: Stored water in Unity is far below average and will not fill but should provide a sufficient supply to its users. Thief Valley reservoir is full as usual.
 - Snow-Cover: The snow-pack has a water content 94 percent average on the Burnt, 96 percent on the Powder, and 79 percent average on Pine Creek. All on very dry soils.
 - Soil-Moisture: All mountain watershed soils are extremely dry and will soak up much of the early snow-melt water.
 - Precipitation: Fall precipitation was 43 percent average and winter precipitation was 66 percent average. Abnormally heavy precipitation in early summer will be needed to improve the water outlook.



WATER SUPPLY OUTLOOK For April-September, 1955a

	Acreage	
Source of Water	Irrigated	Outlook
Anthony Creek	1,667	Sufficient water for one irrigation. Snow-cover greater than last year but watershed woils are exceptionally dry.
Big Creek	3,986	One irrigation is about all that is expected. Snow-cover slightly greater than last year.
Burnt River	27,448	Sufficient water for all lands except the North Fork if carefully used. Unity Reservoir holds a very limited supply but should provide enough for lands usually served.
Clear Creek	3,570	Less water available than for last year. Snow-cover is only 79 percent average.
Eagle and Goose	10,449	Less water than last year but no serious shortages foreseen this year.
Fish Creek and Lake Forks	1,463	Less water available than for last year Snow-cover about 89 percent of last year.
Marble Mill and Goodrich Creeks	2,780	Less water than last year but enough for one good irrigation in early season Snow-cover is about same as last year.
McMullen Slough (Pine Valley below Langren)	1,800	Less water than last year but sufficient.
Pine Creek	11,381	Snow-cover about 89 percent of last year. Water supply less than last year Dry Gulch area will be short early.
Pine (East) Creek	1,363	Less water than last year. Snow-cover is 79 percent average.
Powder River	43,980	Forecast streamflow at 59 percent average. Snow-cover good but soils are verdry. Thief Valley Reservoir has full supply of water.
Powder (North) River	18,146	Water about the same as last year except streamflow will fall off earlier than usual. Snow-cover little better

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - Contd.)

Source of Water	Acreage Irrigated	
Rock Creek	9,902	Enough water for one good irrigation. Recent water rights will be short in late season. Snow-cover is some better than last year but watershed soils are all very dry.
Salmon Creek	1,200	Water for one good irrigation.
Spring Creek	290	Water for one good irrigation.
Wolf Creek	3,515	Enough water for one irrigation only. Snow-cover slightly better than last year.

STREAMFLOW FORECASTS^a As of April 1, 1955

i	Gaging Station	Seasonal St	treamflow in 1000 a.f.	1955
No.	Name	Forecast 1955	Forecast Avg. Period 1943-52	as % of Avg.
ile3	Burnt River near Hereford*	24.0	AprSept. 46.5	52
152	Powder River at Salisbury	.39.0	AprSept. 66.0	 59 ·
152	Powder River at Salisbury	38.0	AprJuly 64.1	59
*	Corrected to natural flow	- · · · · · · · · · · · · · · · · · · ·	The second secon	

RESERVOIR STORAGE

	Usable	Thousand	a.f. i	in storage	about April 1,	1955	-
Reservoir	Capacity 1000 a.f.	1955	1954	1953	10 Yr. Avg. 1943-52	.1	1955 as % of 10 Yr. Avg.
Unity	25.2	4.5	15.4	14.9	12.9		35

SNOW COVER
As of April 1, 1955

Snow Course		195				tent(in)	1955
No. Name	Elev.	Snow Depth (in)	Water Content (in)	1954	1953	Average	as % of Avg.
below 5500' 18E13 Blue Mtn. Sum. 17E1 Dooley Mtn. 18E3 Eilertson Mdws. 18E8 Gold Center 17D8 Schneider Mdws. 18E9 Tipton	5098: 5430: 5400: 5340: 5400: 5100:	30 25 34 34 65 28	8.2 7.9 11.4 10.9 24.0 10.8	5.3 4.4 10.2 12.5 27.0 7.2	10.0 11.6 15.4 15.5 39.3 11.3	7.7 8.9 12.0 12.2 30.3 9.7	106 89 95 89 79 111
Average 5500' to 6000' . 18E14 Barney Cr. 18E5 Bourne 17D7 Taylor Green**	5950° 5800° 5740°	22 43 Report	6.7 15.0 delayed	6.0 15.8 12.8	3.8 20.6 20.5	13.5 8.9 16.0 16.8	90 75 94
Average above 6000!	n aa oo dhadaanaan ah aasaad		10.8	10.9	14.7	12.4	87
18El Anthony Lake 18E6 Goodrich Lake 18D10 Summit Springs**	7125 t 6775 t 6000 t	71 75 Report	28.5 26.2 delayed	26.7 38.1* 16.6	30.7 48.0 18.6	27.9 41.9 21.1	102 63
Average		८के क्ल	27.4	32.4	39.4	34.9	79
*Verage (10 Courses) * Partly estimated.	*	∜ Omitted	15.0 I from ave	15.3 rages.	21.1	17.6	85

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1955
Lower Valleys	Very dry	All watershed soils are still exception-
Upper Valleys	Very dry	ally dry except where early snow-melt
Mountains	Very dry	has wet top few inches.

PRECIPITATION DATA 1954-55

5

Station Name	Elev.	Sept	Oct	Nov -	Dec.	Jan.	Feb.	Mar	Ave.	Avg. Normal	*	Avg. as of Norma
Austin 3S	4333									1.95		55
Baker KBKR	3446	0.68								0.85		68
						•		, ,	_			
Halfway	2675	0.76							- '	2.40		64
Huntington	2150									1.31		49
Richland	2215									0.95		6L ₁
Rock Creek	4150	0.84	0.51	1.23	1.67	1.46	1.27	1.85	1.26	1.91		66
Unity	4031	0.16	0.24	0.23	0.65	0.47	0.24	0.71	0.39	1,00		39
Average		0.45	0.28	0.74	1.65	1.05	0.88	1.04	0.87	1.48		59
Average N	ormal*	0.70	1.07	1.62	1.94	1.94	1.79	1.30				
Avg. as %			26%	46%	85%	54%	49%	80%				
Fall Avg. Normal (S			43%									
* Based o	n USWB d a	ta			е	- Es	timat	ed				

POWDER RIVER, BURNT RIVER and PINE CREEK WATERSHEDS WATER CHE

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CHRRENT SERIAL RECORD

as of **APRIL 1, 1956**

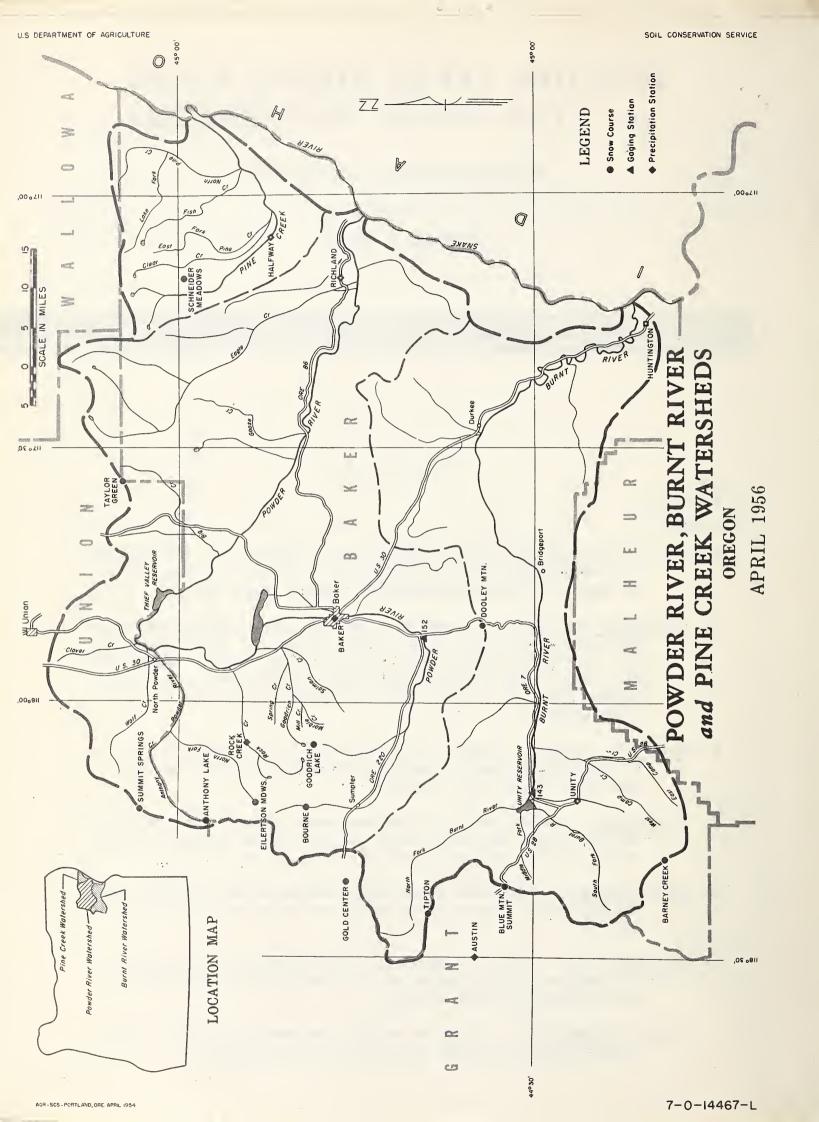
U. S DEPARTMENT OF AGRICULTURE

U.S.SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

For details see page:

- 1-2 Water Supply Outlook: Good to ample water supplies are forecast for this entire area with soil moisture so great that runoff will be above the average expected from usual snow-melt.
- 2 Streamflow Forecasts: Powder River is forecast to produce one-third above average run-off during April-September. This figure is the 7th highest volume since records began in 1904. Burnt River will flow nearly one-half more than normal and will be the 4th highest flow since 1930. Flow of other streams will be much above average.
- 2 Reservoir Storage: Thief Valley reservoir will serve its lands up to capacity and Unity reservoir, although spilling now, will also have ample water supplies.
- 3 Snow-Cover: Water content of the snow-pack is above average throughout the area. On Powder River the snow is 126 percent average; on Burnt River and Pine Creek it is 112 percent average.
- Soil Moisture: All soils in mountain watersheds are extremely wet 3 and will cause snow-melt or rain-water to enter the streams rapidly.
- Precipitation: Fall precipitation over the area was 137 percent of average. Total precipitation since September 1st has been about one-third above average.
 - Current Streamflow: Winter streamflow has been much above average with freshets occurring three times since January 1.



WATER SUPPLY OUTLOOK For April-September, 1956a

Scurce of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Ample water for all usual irrigation. Snow-cover is much above average.
Big Creek	3,986	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Burnt River	27,448	Adequate water for all usual irrigation. For lands served from Unity Reservoir the supply should be ample. Even the North Fork should have above average flow.
Clear Creek	3,570	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Eagle and Goose	10,449	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Fish Creek and Lake Forks	1,463	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Marble Mill and Goodrich Creeks	2,780	Adequate water for all usual irrigation. Show-cover is much above that of last year.
McMullen Slough (Pine Valley below Langren)	1,800	Ample water for all usual irrigation. River flow to be one-third above average.
Pine Creek	11,381	Adequate water for all usual irrigation. Snow-cover is much better than last year. Dry Gulch area should have good supplies.
Pine (East) Creek	1,363	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Powder River	980, و13	Ample water for all usual irrigation. Flow of river will be one-third above average and will rank 7th highest since records began in 1904.
Powder (North) River	18,11,6	Ample water for all usual irrigation. Snow-cover is much better than last year.

a - Assuming normal meteorological conditions during the April - September period.

	A	
Source of Water	Acreage Irrigate	
Rock Creek		Enough water for all usual irrigation. Late summer flow should hold up well. Snow-cover is better than last year.
Salmon Creek	1,200	Adequate water for all usual irrigation.
Spring Creek	290	Adequate water for all usual irrigation.
Wolf Creek	3,515	Adequate water for all usual irrigation. Snow-cover much above last year. Shaw Reservoir filled very early this year.

STREAMFLOW FORECASTS^a As of April 1, 1956

-	Gaging Station	Seasonal St	Seasonal Streamflow in 1000 a.f.				
		Forecast		_	æ% of 15-		
No.	Name	1956	Period_	1938-52	Yr. Avg.		
143	Burnt River near Hereford*	61.0	AprSept.	41.8	146		
152	Powder River at Salisbury	84.0	AprSept.	63.4	132		
152	Powder River at Salisbury	82.0	AprJuly	61.6	133		

^{*} Corrected to natural flow

RESERVOIR STORAGE

	Usable	Thousand	a.f. in	storage	about April 1, 1956	1956 as % of
Reservoir	Capacity 1000 a.f.	1956	1955	1954	15 Yr. Avg. 1938-52	15 Yr. Avg.
Unity	25.2	18.3	4.5	15.4	14.9	123
,						-~)

SNOW COVER As of April 1, 1956

	Snow Course		1950)	Wat	cer Conte		1956 as
No.	Name	Elev.	Snow Depth (In.)	Water Content (In.)	1955		5 yr.Avg. 1938-52	% of 15- yr. Avg.
18E13 17E1 18E3 18E8 17D8 18E9	below 5500! Blue Atn. Sum. Dooley Atn. Eilertson Mdws. Gold Center Schneider Mdws. Tipton	5098 5430 5400 5340 5400 5100	28 27 36 39 80 32	10.1 ^a 9.1 13.7 15.9 33.6 11.9	8.2 7.9 11.4 10.9 24.0 10.8	5.3 4.4 10.2 12.5 27.0 7.2	15.8 9.1** 11.9 11.9** 29.9 9.7**	129 100 115 134 112 123
	Average		-	15.7	12.2	11.1	13.4	117
18E14 18E5 17D7	5500' to 6000' Barney Cr. Bourne Taylor Green	5950 5800 5740	25 53 55	8.9 20.9 19.9	6.7 15.0 14.4	6.0 15.8 12.8	9.4** 15.9 16.8	95 131 118
	Average			16.6	12.0	10.9	14,0	119
18E1 18E6 18D10	above 6000 ! Anthony Lake Goodrich Lake Summit Springs	7125 6775 6000	90 104 71	37.3 45.7 28.4	28.5 26.2 19.1	26.7 38.1* 16.6	27.9 11.1;** 21.1**	134 110 135
	Average			37.1	21.3	32.4	30.1	123
%Pa	Average (12 Courses) — 21.3 15.3 15.2 17.7 120 *Partly estimated. ** Average for less than 15 years of record in 1938-52 period aTelegraphic but not less than 5 years.							

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1,1956					
Lower Valleys		year, all mountain and valley					
Upper Valleys	heavy precipitation a completely "recharged	dry. An unusual combination of and early winter snow-melt has					
Mountains	scils are now extremely wet.						

PRECIPITATION DATA 1955-1956

Station			Precip						Avg.	Avg. as %
Name	Elev.	Sept.	Oct. Nov	Dec.	Jan.	Feb.	Mar.	Avg.	Normal*	of Normal
Austin 3S	4333	1.30	1.43 ^e 3.8	ı 6 . 31	4.75	2.40	1.21	3.03	1.95	155
Baker KBKR	3446	0.99	1.03 1.9	3 3.46	1.15	0.73	^e 0.20	1.36	0.85	160
Halfway	2675	1.96	0.83 3.7	3 4.34	4.91	1.46	1.12	2.62	2.40	109
Huntington	2150	0.54	0.25 1.6	1 2.82	2.49	0.88	0.11	1.24	1.31	94
Richland	2215	0.95	0.40 2.3	1.67	1.45	0.86	^e 0.38	€1.15	0.95	121
Rock Creek	4150	1.00	2.10 3.7	0 6.20	3.80	3.13	1.23	3.02	1.91	158
Unity	4031	0.81	0.46 1.2	2.54	1.82	0.83	0.21	1,12	1.00	112
Average		1.08	0.93 2.6	2 3.90	2.91	1.47	0.64	1.94	1.48	131
Average No	rmal*	0.70	1.07 1.6	2 1.94	1.94	1.79	1.30			
Avg. as %	of Normal	154	87 162	201	150	82	49			
Fall Avg. Normal (Se			.37							
* Based on	USWB dat	ca e	estimated							

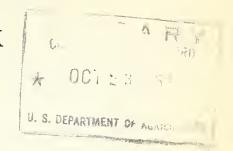
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POWDER RIVER, BURNT RIVER and PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1957



U.S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

For details see page:

- 1-2 Water Supply Outlook: Fair to good water supplies are forecast for the entire area. The average amount of irrigation water can be expected.
- Streamflow Forecasts: Powder River should have an average flow during the next six months. Burnt River's flow during this same period will be 86 percent average.
- Reservoir Storage: Thief Valley and Unity reservoirs are full and will serve their lands to capacity.
- 3 Snow-Cover: Snow cover is normal to near normal as follows:
 Burnt River, 92 percent; Powder River, 92 percent; and Pine
 Creek, 101 percent.
- 3 Soil Moisture: Soils are well wetted and favor a good runoff.
- 4 Precipitation: Water year precipitation to date has been 101 percent average. March precipitation was 192 percent average.

WATER SUPPLY OUTLOOK For April-September, 1957^a

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Adequate water for usual irrigation.
Big Creek	3,986	Adequate water for usual irrigation. Snow cover is slightly above normal.
Burnt River	27,448	Sufficient water for all lands serve from Unity reservoir. Some water shortages above the reservoir unless favorable rainfall occurs in May-August.
Clear Creek	3,570	Average water supplies expected this year.
Eagle and Goose	10,449	Average water supplies expected this year.
Fish Creek and Lake Forks	1,463	Average water supplies expected this year.
Marble, Mill and Goodrich Creeks	2,780	Sufficient water for at least one irrigation.
McMullen Slough (Pine Valley below Langren)	1,800	Sufficient for usual irrigation
Pine Creek	11,381	Average water supplies expected this year.
Pine (East) Creek	1,363	Average water supplies expected this year.
Powder River	43,980	Average water supplies for usual irrigation. Thief Valley reservoir is full.
Powder (North) River	18,146	Adequate water supplies. Snow-cover less than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

Source of Water	Acreage Irrigated	Outlook		
Rock-Creeking to the state of t	9,902	Enough water for at least one good irrigation.		
Salmon Creek	1,200	Enough water for at least one good irrigation.		
Spring Greek at least of the late of the state of the sta		Enough water for at least one good irrigation.		
Wolf Creek	3,515	Average water supplies expected this year.		

STREAMFLOW FORECASTS^a As of April 1, 1957

. The state was great to the State of the contract of the cont	· (= ·	Mark the second	$x_{ij} = 4^{-i\omega t}$
Gaging Station	Seasonal Streamflow	in 1000 a.f.	1957
No. Name in the state of the st	Forecast Foreca 1957 Perio	ast 15 yr.Avg. od 1938-52	
143 Burnt River near Hereford*	36.0 AprSe	ept. 41.8	86
152 Powder River near Baker	64.0 AprSe	ept. 63.4	101
152 Powder River near Baker	63.0 AprJu	ily 61.6	102
14			S. C.

Lander Land Afgerra version of review. Lander version of the control of the RESERVOIR STORAGE

the second of the second of

	Usable	Thousand a.f. i		about April 1, 195	
Reservoir	Capacity	1957 1956			1957 as % of 15 Yr. Avg.
Unity	25.2		1. 4.5	1 14.9 . was	148

	Snow Course						net (In.)	1957 as
No.	Name	Elev.	Snow Depth (In.)	Water Content (In.)		1955	15-Yr.Avg. 1938-52	% of 15- Yr. Avg.
	below 55001			· · · · · · · · · · · · · · · · · · ·			• • •	• •
18E13 17E1 18E3 18E20 18E8	Blue Mtn. Summit Dooley Mtn. Eilertson Mdws. Eldorado Pass Gold Center	5098 5430 5400 4600 5340	24 23 27 0 39	7.6 6.6 9.5 0.0 12.8	10.1 9.1 13.7 0.0 15.9	8.2 7.8 11.4 1.6 10.9	15.8 9.1** 11.9	48 73 80 108
17D8 18E9	Schneider Mdws. Tipton	5400 5100	. 81 28	30.3 9.6	33.6	24.0 10.8	29•9 <u>9•7</u> **	101 99
	Average			12.7	15.7	12.2	14.7	86
18E14 18E5 17D7	5500' to 6000' Barney Creek Bourne Taylor Green	5950 5800 5740	25 53 52	7.3 15.9 17.6	8.8 20.9 19.9	6.7 15:0 14.4	9.4** 15.9 16.8	78 100 105
	Average			13.6	16.5	12.0	14.0	97
18E1 18E6 18D10	above 6000 Anthony Lake Goodrich Lake Summit Springs	7125 6775 6000	88 92 67	29.3 32.9 20.9	37.3 45.7 28.4	28.3 26.2 19.1	27.9 41.4** 21.1**	105 79 99
	Average			27.7	37.1	24.5	30.1	92
	rage (12 courses)			16.7	21.3	15.2	18.4	. 91

*Partly estimated.

**Average for less than 15 years of record in 1938-52 period but not less than 5 years.

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1957
Lower Valleys		
Upper Valleys	Good	(Excellent
Mountains		(

PRECIPITATION DATA 1956-57

Station	reserve care sergion se		Precip	itation :	inche	es)	Avg.	Avg.as %
Name	Elev.	Sept. Oct.	Nov. D	ec. Jan.	Feb.	Mar. Avg.	Normal*	of Normal
Austin 35	4333	•39 2.11	.46 1	.84 1.84	2.35	3.97 1.85	1.95	95
Baker KBKR	3446	.42 3.19	.17e	• 55 1.45	.72	1.52e1.14	.85	134
Halfway	2675	.26 1.21	43 2	.82 2.22	2.62	3.84e1.92	2.40	80
Huntington	2150	.63 4.01	.04	•99 •95	1.24	1.96 1.40	1.31	107
Richland	2215	.17 2.08	.24 1	.23 1.74	976	1.48e1.13	•95	119
Rock Creek	4150	•20, 2.66	1.11 2	.57 1.71	2.76	2.84 1.98	1.91	104
Unity 5	١٥31	.09 2.19	.15 1	.10 .83	.85	1.90 1.02	1.00	102
Average	to the second	···31 2.49	37 1	.58 1.53	1.64	2.5011.49	1-48	101
Average Norm	al* 🚋	.70 1.07	1.62 1	.94 1.94	1.79	1.30	nam segán se Segán segán segán segán	g ve Marie
Avg. as % of Fall Avg. as			22	81 79	92	192		
Normal (Sept			19 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	to the same of the	200	.,		in spirite Spiritens og in sære y
* Based on	USWB da	ta e	stimate	d ,				

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Based on USWB data estimated

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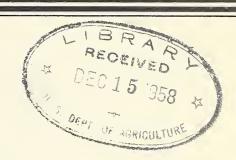
Personal POWDER RIVER, BURNT RIVER A 292,9 and PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of **APRIL 1, 1954**

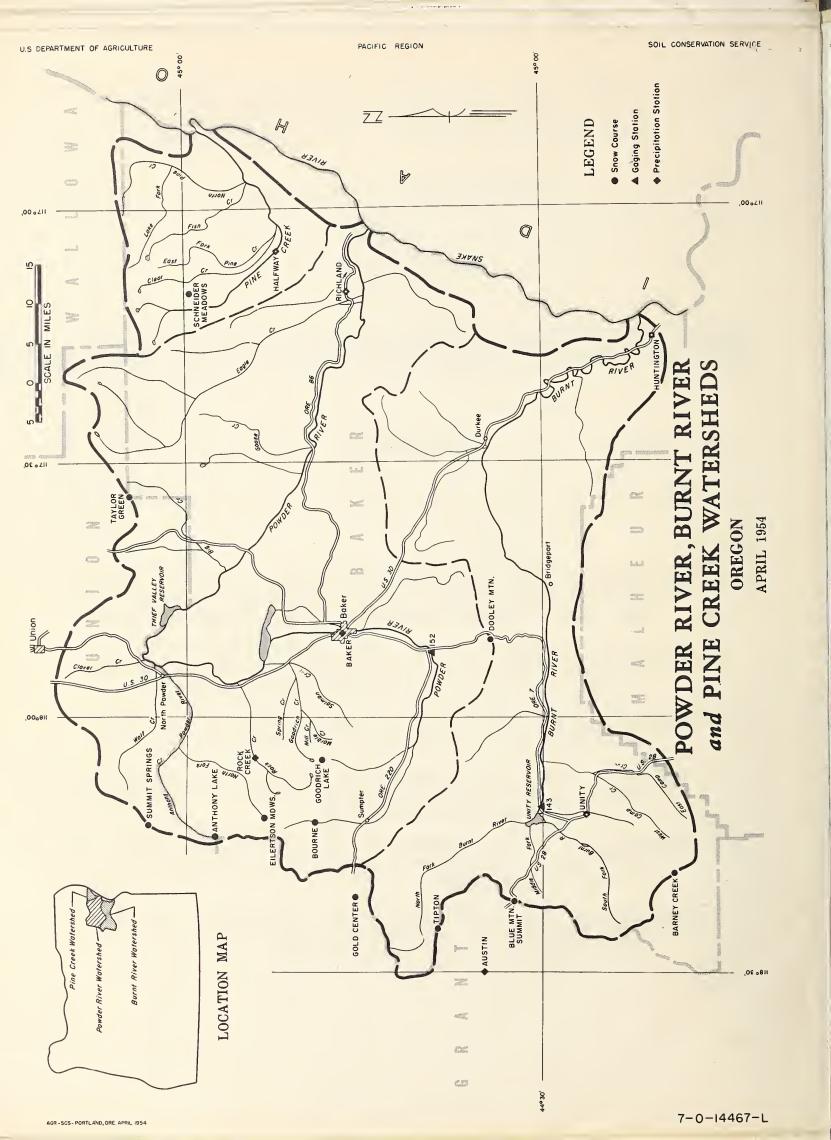
U.S.SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY



Page

- Water Supply Outlook: Below average water supplies for most areas with late season shortages expected for all except the earliest water rights. Storage water will be barely adequate this year.
 - Streamflow Forecasts: The Powder is forecast to flow 77 percent of the 10 year average and Burnt River 60 percent of average. Flow of North Powder, Eagle and Pine Creeks will be below average.
 - Reservoir Storage: Stored water in Unity and Thief Valley reservoir was reported as about average and satisfactory for this season.
 - Snow Cover: This year's snow-pack varies from 75 percent average on the Burnt to 88 percent average on Pine Creek. On the Powder the snow-cover is 85 percent average.
 - 3 Soil Moisture: Soils up to 4000 feet are fairly dry. At higher elevations they have improved somewhat over the abnormally dry situation of last season.
 - Precipitation: Fall precipitation was 59 percent normal; while winter precipitation was 70 percent normal. September through March precipitation was 67 percent normal



WATER SUPPLY OUTLOOK - For April-September, 1954 a

	Acreage	
Source of Water	Irrigat	ed Outlook
Anthony Creek	1,667	Sufficient water for one irrigation. Snow-cover is slightly below last year and average.
Big Creek	3,986	Only enough water for one irrigation. Snow-cover is 62 percent of last
Burnt River	27, цц8	year 75 percent average. Sufficient water for all lands except on the North fork where late season shortages will be experienced. Snow-cover is 75 percent average
Clear Creek	3,570	and only 61 percent of last year. Less irrigation water than last year. Snow-cover is about half of last year's cover.
Eagle and Goose	10,4419	Less irrigation water than last year. Snow-cover is 69 percent of last year and 89 percent of average.
Fish Creek and Lake Forks	1,463	Less water than last year. Snow-cover is about half of last year's
Marble, Mill and Goodrich Creeks	2,780	Sufficient water for one irrigation. Snow-cover is 79 percent of last year and 90 percent average.
McMullen Slough	1,800	Less water than last year for irrigation. Snow-cover is 69 percent of last year.
Pine Creek	11,381	Less irrigation water than last year. Snow-cover is 89 percent average and 69 percent of last year. Dry Gulch area will be short of water.
Pine (East) Creek	1,363	Less irrigation water than last year. Snow-cover is about half of last year's cover.
Powder River	Li3,980	Adequate for lands served from Thief Valley reservoir but short supplies for late water rights especially late in the season. Snow-cover is 85% percent average & 74 percent of last
Powder (North) River	18,146	Sufficient water for one irrigation. Snow-cover is 88 percent of last year and about 85 percent average.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

Source of Water	Acreage Irrigated Outlook	
Rock Creek	Sufficient for one good irriga all lands. Late rights will s late in the season. Snow-cove 66 percent of last year.	uffer r is
Salmon Creek	1,200 Sufficient water for one irrig Snow-cover is 79 percent of la	
Spring Creek	290 Sufficient water for one irrig	ation
Wolf Creek	3,515 Sufficient water for one irrig only. Snow-cover is 82 percen last year.	ation t of

STREAMFLOW FORECASTS^a - As of April 1, 1954

	Gaging Station	Seasonal St		And the design of the section of the	1954
3.7	NT	Forecast		Avg.	as %
No.	Name	Apr:Sept.	Apr-July	TATIS>T	of Avg
143	Burnt River near Hereford*	27.0	destrois destrois	45.1	60
152	Powder River at Salisbury	50.0	directions directions	64.7	77
152	Powder River at Salisbury	enteres surcom	48.0	62.7	77
	* Corrected to natural flo	N AT			

RESERVOIR STORAGE

Thousand	a.f.	in storage about	
			1954 as %
1954	1953	1942-51	of yr.Avg.
15.4	14.9	13.7	112
	195h	195կ 1953	

SNOW COVER - As of April 1, 1954

	Snow Course		1	954		Content (in)	1954
No.	Name	Elev.	Snow Depth (in)	Water Depth (in)	1953	Average	as % of Avg
100	below 55001	nade .					
141	Blue Mtn. Sum.	5098	15.5	5.3	10.0	7 <u>.</u> 8	68
156	Dooley Mtn.	54301	14.7	4.4	11.6	9.2	48
151B	Eilertson Mdws.	5400	30.8	10.2	15.4	12.1	84
249	Gold Center	53408	31.8	12,5	15.5	12.2	102
161	Schneider Mdws.	54001	66.4	27.0	39.3	30.5	89
142	Tipton	5100	21.2	7.2	11.3	9.8	73
	Average		man Kap	11,1	17.2	13.6	82
4	55001 to 60001	gan.					
143	Barney Cr.	59508	22,3	6.0	8.8	9.3	65
154	Bourne	5800	40,2	15.8	20.6	16.0	99
185	Taylor Green	5740°	35.8	12.8	20.5	17.0	75
	Average	N-1-1		11.5	16.6	14.1	82
epth	Above 6000:	-					
155	Anthony Lake	7125	75.2	26.7	30.7	27.9	96
157	Goodrich Lake	6775	91.3	38.1*	48.0	42.5	90
184	Summit Springs	60001	49.7	16.6	18.6	21.4	78
	Average		egiss	27.1	32.4	30,6	89
	(Average 12 Snow artly estimated	Course	s)	15.2	20,9	18,0	84

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1954
Lower Vaileys	Fairly dry	Fairly dry
Upper Valleys	Fairly dry	Fairly dry
Mountains	Nearly Normal	Dryer than normal
West Add and the second and the seco		

PRECIPITATION DATA - As of April 1, 1954

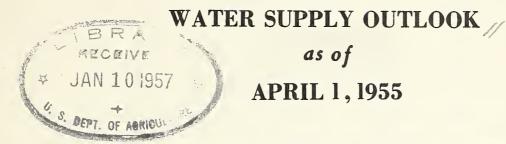
Station	1				Pro	ecipi	tation	(inc	nes)		Avg as
Name	Elev.	Sept	Oct.1	• vcl	Dec.	Jan.	Feb.	Mar.	Avg	Normal*	3 of Normal
Austin 3S	4333	0.01	1.23	e 2.63	e 2.26	2.73	0.96	0.71	1.50	1.95	77%
Baker WB City	3446	T ·	0.86	1.36	1.38	0.84	0.44	0.72	0.30	1.17	68%
Halfway	2675	0.00	0.20	1.00	3,22	1.77	0.80	1.65	1.23	2.40	51%
Huntington	2150	0.00	0.20	_	2.02				0.79	1.31	60%
Richland	2215	T	0.25	0.97	0.75	0.55	0.20	0•1†8	0.46	0.95	48%
Rock Creek	4150	0.11	0.81	2.34	2.71	3.80	1.32	1.15	1.75	1.91	92%
Unity	4031	0.02	0.58	0.81	0.88	0.92	0.39	0.43	0.58	1.00	58%
Average	and the second s	0.02	0.59	1.43	1.89	1.70	0.64	0.84	1.02	1.53	67%
Normal		0.72	1.10	1.63	2.03	1.99	1.84	1.35			
Average as % of Norma		3%	54%	88%	93%	85%	33%	62%			
Fall (Sep- Oct-Nov) as % of Norma	3		59%	Cigo.	-						

e-estimated

*-as published USWB

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POWDER RIVER, BURNT RIVER and PINE CREEK WATERSHEDS



as of APRIL 1, 1955

CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

Page

- 1 & 2 Water Supply Outlook: "Poor" to "fair" supplies of water are forecast for most areas in these basins with late season shortages foreseen for all except the earliest water rights.
 - 2 Streamflow Forecasts: The Powder is forecast to flow 59 percent of the 10 year average and Burnt River 52 percent of average. Flow of other streams will be proportionately low.
 - 2 Reservoir Storage: Stored water in Unity is far below average and will not fill but should provide a sufficient supply to its users. Thief Valley reservoir is full as usual.
 - 3 Snow-Cover: The snow-pack has a water content 94 percent average on the Burnt, 96 percent on the Powder, and 79 percent average on Pine Creek. All on very dry soils.
 - Soil-Moisture: All mountain watershed soils are extremely dry 3 and will soak up much of the early snow-melt water.
 - 4 Precipitation: Fall precipitation was 43 percent average and winter precipitation was 66 percent average. Abnormally heavy precipitation in early summer will be needed to improve the water outlook.

WATER SUPPLY OUTLOOK For April-September, 1955a

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Sufficient water for one irrigation. Snow-cover greater than last year but watershed Soils are exceptionally dry.
Big Creek	3,986	One irrigation is about all that is expected. Snow-cover slightly greater than last year.
Burnt River	27,448	Sufficient water for all lands except the North Fork if carefully used. Unity Reservoir holds a very limited supply but should provide enough for lands usually served.
Clear Creek	3,570	Less water available than for last year. Snow-cover is only 79 percent average.
Eagle and Goose	10,449	Less water than last year but no serious shortages foreseen this year.
Fish Creek and Lake Forks	1,463	Less water available than for last year Snow-cover about 89 percent of last year.
Marble Mill and Goodrich Creeks	2,780	Less water than last year but enough for one good irrigation in early season Snow-cover is about same as last year.
McMullen Slough (Pine Valley below Langren)	1,800	Less water than last year but sufficient.
Pine Creek	11,381	Snow-cover about 89 percent of last year. Water supply less than last year Dry Gulch area will be short early.
Pine (East) Creek	1,363	Less water than last year. Snow-cover is 79 percent average.
Powder River	43,980	Forecast streamflow at 59 percent average. Snow-cover good but soils are verdry. Thief Valley Reservoir has full supply of water.
Powder (North) River	18,146	Water about the same as last year except streamflow will fall off earlier than usual. Snow-cover little better

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - Contd.)

	Acreage	
Source of Water	Irrigated	Outlook
Rock-Creek	9 , 902	Enough water for one good irrigation. Recent water rights will be short in late season. Snow-cover is some better than last year but watershed soils are all very dry.
Salmon Creek	1,200	Water for one good irrigation.
Spring Creek	290	Water for one good irrigation.
Wolf Creek	3,515	Enough water for one irrigation only. Snow-cover slightly better than last year.

STREAMFLOW FORECASTS^a As of April 1, 1955

	Gaging Station	Seasonal St	1955		
No.	Name	Forecast 1955	Forecast Period	Avg. 1943-52	as %
143	Burnt River near Hereford*	24.0	AprSept.	46.5	52
152	Powder River at Salisbury	39.0	AprSept.	66.0	59
152	Powder River at Salisbury	38.0	AprJuly	64.1	59
*	Corrected to natural flow		rs.		

RESERVOIR STORAGE

	Usable	Thousand	a.f. i	n storage	about April 1,	
Reservoir	Capacity 1000 a.f.	1955	1954	1953	10 Yr. Avg. 1943-52	1955 as % on 10 Yr. Avg.
Unity	25.2	4.5	15.4	14.9	12.9	35

SNOW COVER As of April 1, 1955

	Snow Course		195	5	Wat	er Cont	tent(in)	1955
No.	Name	Elev。	Snow Depth (in)	Water Content (in)	1954	1953	Average	as % of Avg.
18E13 17E1 18E3 18E8 17D8 18E9	below 5500' Blue Mtn. Sum. Dooley Mtn. Eilertson Mdws. Gold Center Schneider Mdws. Tipton	50981 54301 54001 53401 54001	30 25 34 34 65 28	8.2 7.9 11.4 10.9 24.0 10.8	5.3 4.4 10.2 12.5 27.0 7.2	10.0 11.6 15.4 15.5 39.3 11.3	7.7 8.9 12.0 12.2 30.3 9.7	106 89 95 89 79 111
	Average		gab ean	12.2	11.1	17.2	13.5	90
18E14 18E5 17D7	5500; to 6000; Barney Cr. Bourne Taylor Green**	59501 58001 57401	22 43 Report	6.7 15.0 delayed	6.0 15.8 12.8	8.8 20.6 20.5	8.9 16.0 16.8	75 94
	Average		-	10.8	10.9	14.7	12.4	87
18E1 18E6 18D10	above 6000? Anthony Lake Goodrich Lake Summit Springs**	7125 [‡] 6775 [‡] 6000 [‡]	71 75 Report	28.5 26.2 delayed	26.7 38.1* 16.6	30.7 48.0 18.6	27.9 41.9 21.1	102 63
	Average		CAN gard	27.4	32.4	39.4	34.9	79
	erage (10 Courses) Partly estimated.	*	« Omitted	15.0 I from ave	15.3 rages.	21.1	17.6	85

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1955
Lower Valleys	Very dry	All watershed soils are still exception-
Upper Valleys	Very dry	all; dry except where early snow-melt
Mountains	Very dry	has wet top few inches.

PRECIPITATION DATA 1954-55

Station										Avg.		Avg. as
Name	Elev.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.	Normal	*	of Norma
Austin 3S	4333	0.15	0.50	0.83	2.01	1.32	1.30	^e 1.39	1.07	1.95		55
Baker KBKR	3446	0.68	0.25	0.39	1.05	0.17	0.70	0.79	0.58	0.85		68
Halfway	2675	0.76	0,29	0.98	3.81	1.50	1.73	1.73	e1.54	2.40		64
Huntington	2150	0.25	0.07	1.01	1.45	1.27	0.26	0.19	0.64	1.31		49
Richland	2215	0.31	0.10	0.54	0.88	1.18	0.64	0.65	e0.61	0.95		64
Rock Creek	4150	0.84	0.51	1.23	1.67	1.46	1.27	1.85	1,26	1.91		66
Unity	4031	0.16	0.24	0.23	0.65	0.47	0.24	0.71	0.39	1.00		39
Average		0.45	0.28	0.74	1.65	1.05	0.88	1.04	0.87	1.48		59
Average Norm	na.l%	0.70	1,07	1.62	1.94	1.94	1.79	1.30				
Avg. as % of Fall Avg. as			26%	46%	85%	54%	49%	80%				
Normal (Sept			43%									
* Based on I	JSWB dat	a			е	- Es	timat	ed				

POWDER RIVER, BURNT RIVER and PINE CREEK WATERSHEDS WATER SUPPLY OUTLOOK RARY CURRENT SERIAL RECORD

as of

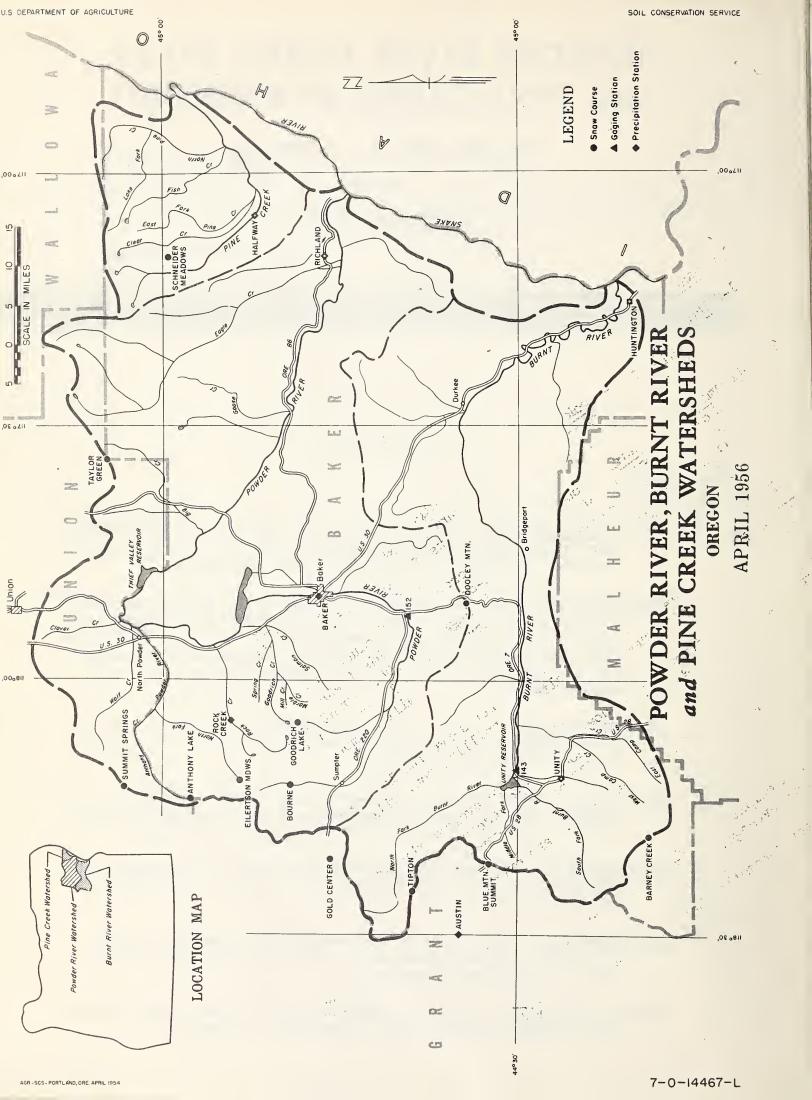
CURRENT SERIAL RECORD APRIL 1, 1956 * OCT 2 3 1958 W. S. DEPARTMENT OF AGRICULTURE

U.S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

For details see page:

- 1-2 Water Supply Outlook: Good to ample water supplies are forecast for this entire area with soil moisture so great that runoff will be above the average expected from usual snow-melt.
- 2 Streamflow Forecasts: Powder River is forecast to produce one-third above average run-off during April-September. This figure is the 7th highest volume since records began in 1904. Burnt River will flow nearly one-half more than normal and will be the 4th highest flow since 1930. Flow of other streams will be much above average.
- 2 Reservoir Storage: Thief Valley reservoir will serve its lands up to capacity and Unity reservoir, although spilling now, will also have ample water supplies.
- 3 Snow-Cover: Water content of the snow-pack is above average throughout the area. On Powder River the snow is 126 percent average; on Burnt River and Pine Creek it is 112 percent average.
- 3 Soil Moisture: All soils in mountain watersheds are extremely wet and will cause snow-melt or rain-water to enter the streams rapidly.
- 4 Precipitation: Fall precipitation over the area was 137 percent of average. Total precipitation since September 1st has been about one-third above average.
 - Current Streamflow: Winter streamflow has been much above average with freshets occurring three times since January 1.



WATER SUPPLY OUTLOOK For April-September, 1956a

Canada of Links	Acreage	(h) \$1 - a1-
Scurce of Water	Irrigated	Outlook
Anthony Creek	1,667	Ample water for all usual irrigation. Snow-cover is much above average.
Big Creek	3,986	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Burnt River	8بلبار 27	Adequate water for all usual irrigation. For lands served from Unity Reservoir the supply should be ample. Even the North Fork should have above average flow.
Clear Creek	3 , 570	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Eagle and Goose	10,449	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Fish Creek and Lake Forks	1,463	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Marble Mill and Goodrich Creeks	2,780	Adequate water for all usual irrigation. Show-cover is much above that of last year.
McMullen Slough (Pine Valley below Langren)	1,800	Ample water for all usual irrigation. River flow to be one-third above average.
Pine Creek	11,381	Adequate water for all usual irrigation. Snow-cover is much better than last year. Dry Gulch area should have good supplies.
Pine (East) Creek	1,363	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Powder River	980, و ډيا	Ample water for all usual irrigation. Flow of river will be one-third above average and will rank 7th highest since records began in 1904.
Powder (North) River	18,146	Ample water for all usual irrigation. Snow-cover is much better than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

	Acrosco	
Source of Water	Acreage Irrigated	Outlook
Rock Creek	o one Lat	ough water for all usual irrigation. te summer flow should hold up well. ow-cover is better than last year.
Salmon Creek	1,200 Ade	equate water for all usual irrigation
Spring Creek	290 _{Ade}	equate water for all usual irrigation.
Wolf Creek	3.515 Snc	equate water for all usual irrigation. ow-cover much above last year. Shaw servoir filled very early this year.

STREAMFLOW FORECASTS^a As of April 1, 1956

	Gaging Station	Seasonal St	reamflow in		1956
No.	Name	Forecast 1956	Forecast Period	15 yr Avg. 1938-52	æ% of 15- Yr, Avg.
110.	TOURC		161100	1//0-/2	## 7 11 V D 0
143	Burnt River near Hereford*	61.0	AprSept.	41.8	146
152	Powder River at Salisbury	84.0	AprSept.	63.4	132
152	Powder River at Salisbury	82.0	AprJuly	61.6	133

^{*} Corrected to natural flow

RESERVOIR STORAGE

	Usable	Thousand	a.f.	in storage	about April 1,	
Reservoir	Capacity 1000 a.f.	1956	1955	1954	15 Yr. Avg. 1938-52	1956 as % of 15 Yr. Avg.
Unity	25.2	18.3	4.5	15.4	14.9	123

As of April 1, 1956

Oligical address on the later of the later o	Snow Course		1958)	Wat	ter Conf	tent(In.)	1956 as
No.	Name	Elev.	Snow Depth (In.)	Water Content (In.)	1955	195L	15 yr.Avg. 1938-52	% of 15- yr. Avg.
18E13 17E1 18E3 18E8 17D8 18E9	below 5500' Blue Mtn. Sum. Dooley Mtn. Eilertson Mdws. Gold Center Schneider Mdws. Tipton	5098 5430 5400 5340 5400 5100	28 27 36 39 80 32	10.1 ^a 9.1 13.7 15.9 33.6 11.9	8.2 7.9 11.4 10.9 24.0 10.8	5.3 4.4 10.2 12.5 27.0 7.2	15.8 9.1** 11.9 11.9** 29.9 9.7**	129 100 115 134 112 123
	Average		morale	15.7	12.2	11.1	13.4	117
18E14 18E5 17D7	5500' to 6000' Barney Cr. Bourne Taylor Green	5950 5800 5740	25 53 55	8.9 20.9 19.9	6.7 15.0 14.4	6.0 15.8 12.8	9.4** 15.9 16.8	95 131 118
	Average		6n-620040	16.6	12.0	10.9	14,0	119
18E1 18E6 18D10	above 6000 Anthony Lake Goodrich Lake Summit Springs	7125 6775 6000	90 104 71	37.3 45.7 28.4	28.5 26.2 19.1	26.7 38.1* 16.6	27.9 41.4** 21.1**	134 110 135
	Average			37.1	21.3	32.4	30.1	123
Average (12 Courses) 21.3 15.3 15.2 17.7 120 *Partly estimated. ** Average for less than 15 years of record in 1938-52 period aTelegraphic but not less than 5 years.								

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1,1956
Lower Valleys		year, all mountain and valley
Upper Valleys	heavy precipitation an	ry. An unusual combination of dearly winter snow-melt has all watersheds so that all
Mountains	(SOILS are now expremen	.y

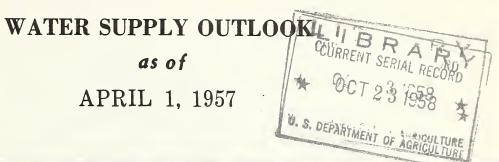
PRECIPITATION DATA 1955-1956

Station				itatio					Avg	Avg. as %
Name	Elev.	Sept.	Oct. Nov	. Dec.	Jan.	Feb.	Mar.	Avg.	Normal*	of Normal
Austin 3S	4333	1.30	1.43 ^e 3.8	4 6.31	4.75	2.40	1.21	3.03	1.95	155
Baker KBKR	3446	0.99	1.03 1.9	3 3.46	1.15	0.73	^e 0.20	1.36	0.85	160
Halfway	2675	1.96	0.83 3.7	'3 4.34	4.91	1.46	1.12	2.62	2.40	109
Huntington	2150	0.54	0.25 1.6	2.82	2.49	0.88	0.11	1.24	1.31	94
Richland	2215	0.95	0.40 2.3	4 1.67	1.45	0.86	^e 0.38	^e 1.15	0.95	121
Rock Creek	4150 -	1.00	2.10 3.7	0 6.20	3.80	3.13	1.23	3.02	1.91	158
Unity	4031	0.81	0.46 1.2	2.54	1.82	0.83	0.21	1.12	1.00	112
A		2 00	0.02.0	·		7 10	0.41	7 01	7 10	127
Average		1.08	0.93 2.6	3.90	2,91	1.4/	0.04	1074	1.48	131
Average No	rmal*	0.70	1.07 1.6	2 1.94	1.94	1.79	1.30			
Avg. as %			87 162	2 201	150	82	49			
	Fall Avg. as % of Fall Normal (Sept-Oct-Nov) 137									
* Based on USWB data estimated										

POWDER RIVER, BURNT RIVER and PINE CREEK WATERSHEDS

as of

APRIL 1, 1957

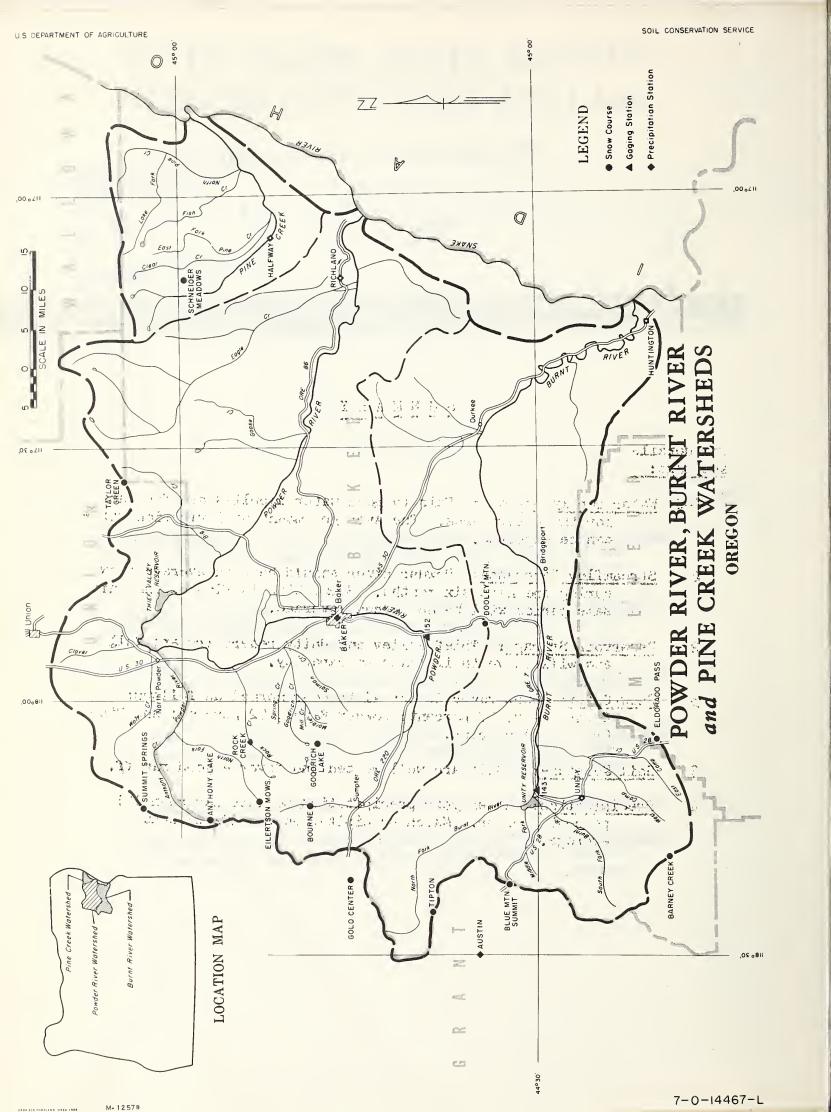


S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

For details see page:

- 1-2 Water Supply Outlook: Fair to good water supplies are forecast for the entire area. The average amount of irrigation water can be expected.
- Streamflow Forecasts: Powder River should have an average flow 2 during the next six months. Burnt River's flow during this same period will be 86 percent average.
- 2 Reservoir Storage: Thief Valley and Unity reservoirs are full and will serve their lands to capacity.
- Snow-Cover: Snow cover is normal to near normal as follows: 3 Burnt River, 92 percent; Powder River, 92 percent; and Pine Creek, 101 percent.
- Soil Moisture: Soils are well wetted and favor a good runoff. 3
- Precipitation: Water year precipitation to date has been 101 4 percent average. March precipitation was 192 percent average.



WATER SUPPLY OUTLOOK For April-September, 1957^a

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Adequate water for usual irrigation.
Big Creek	3,986	Adequate water for usual irrigation. Snow cover is slightly above normal.
Burnt River	27,448	Sufficient water for all lands serve from Unity reservoir. Some water shortages above the reservoir unless favorable rainfall occurs in May-August.
Clear Creek	3,570	Average water supplies expected this year.
Eagle and Goose	10,449	Average water supplies expected this year.
Fish Creek and Lake Forks	1,463	Average water supplies expected this year.
Marble, Mill and Goodrich Creeks	2,780	Sufficient water for at least one irrigation.
McMullen Slough (Pine Valley below Langren)	1,800	Sufficient for usual irrigation
Pine Creek	11,381	Average water supplies expected this year.
Pine (East) Creek	1,363	Average water supplies expected this year.
Powder River	43,980	Average water supplies for usual irrigation. Thief Valley reservoir is full.
Powder (North) River	18,146	Adequate water supplies. Snow-cover less than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

ال عداد مهمت ب		A primary services to the services of the serv
Source of Water	Acreage Irrigated	Outlook
Rock Creek	- A	Enough water for at least one good irrigation.
Salmon Creek	1,200	Enough water for at least one good irrigation.
	290	Enough water for at least one good irrigation.
Wolf Creek	3.515	Average water supplies expected this year.
		

STREAMFLOW FORECASTS^a As of April 1, 1957

	Gaging Station		treamflow in		1957
No.	Name	1957	Forecast Period	15 yr.Avg. 1938-52	as % of 15- Yr. Avg.
143	Burnt River near Hereford*		AprSept.	41.8	86
152	Powder River near Baker	64.0	AprSept.	63.4	101
152	Powder River near Baker	63.0	AprJuly	61.6	102

RESERVOIR STORAGE

	,			* A
	Usable	Thousand a.f. in	storage about April 1, 1	957
· ·	Capacity	:	15 Yr. Avg.	1957 as % of
Reservoir	1000 a.f.	1957 1956	1955 1938-52	15 Yr. Avg.
age of the second of the secon	. 4.		and the second s	
Unity	25.2	22.0 18.3	4.5 14.9	148
. Albert	m 4 4 5 9			

11/12

SNOW COVER
As of April 1, 1957

	Snow Course				Wate			1957 as
No.	Name	Elev.	Snow Depth (In.)	Water Content (In.)	1956	1955	15-Yr.Avg. 1938-52	% of 15- Yr. Avg.
		:					»	,
18E13 17E1 18E3 18E20 18E8 17D8 18E9	Dooley Mtn. Eilertson Mdws.	5098 5430 5400 4600 5340 5400 5100	24 23 27 0 39 81 28	7.6 6.6 9.5 0.0 12.8 30.3 9.6	10.1 9.1 13.7 0.0 15.9 33.6 11.9	8.2 7.8 11.4 1.6 10.9 24.0 10.8	15.8 9.1** 11.9 11.9** 29.9 9.7**	108 101 99
	Average			12.7	15.7	12.2	14.7	86
18E14 18E5 17D7	5500' to 6000' Barney Creek Bourne Taylor Green Average	5950 5800 5 7 40	25 53 52	7.3 15.9 17.6	8.8 20.9 19.9	6.7 15.0 14.4	9.4** 15.9 16.8	78 100 <u>105</u> 97
18E1 18E6 18D10	above 6000 Anthony Lake Goodrich Lake Summit Springs	7125 6775 6000	88 92 67	29•3 32•9 20•9	37.3 45.7 28.4	28.3 26.2 19.1	27.9 41.4** 21.1**	105 79 99
	Average			27.7.	37.1	24.5	30.1	92
Ave	rage (12 courses)	_		16.7	21.3	15.2	18.4	91

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1957
Lower Valleys	((
Upper Valleys	(Good	(Excellent (
Mountains	((

^{**}Partly estimated.

**Average for less than 15 years of record in 1938-52 period but not less than 5 years.

PRECIPITATION DATA 1956-57

Station				Precipita	tion	(inch	es)		Avg.	Avg.as %
Name	Elev.	Sept.	Oct.	Nov. Dec.	Jan.	Feb.	Mar.	Avg.	Normal*	of Normal
Austin 3S	4333	•39	2.11	.46 1.84	1.84	2.35	3.97	1.85	1.95	95
Baker KBKR	3446	.42	3.15	.17e .55	-1.45	• 72	1.52	1.14	.85	134
Halfway	2675	.26	1.24	.43 2.82	2.22	2.62	3.84	1.92	2.40	80
Huntington	2150	.63	4.01	.04 .99	•95	1.24	1.96	1.40	1.31	107
Richland	2215	.17	2.08	24 1.23	1.74	•97	1.48	1.13	•95	119
Rock Creek	4150	.20	2.66	1.11 2.57	1.71	2.76	2.84	1.98	.1.91	104
Unity	١٥31	. 09	2.19	.15 1.10	.83	.85	1.90	1.02	1.00	102
Average		.31	2.49	.37 1.58	1.53	1.6l	2.50	1.49	1.48	101
Average Norm	al*	· • 70	1.07	1,62 1.94	1.94	1.79	1.30	a Laps processing that	- LANGE COUNTY	and the second
Avg. as % of			233	22 81	79	92	192			
Fall Avg. as Normal (Sept							14. 14.	1		
* Based on	USWB da	ta	ees	stimated						15.1